

**Remarks**

This Application has been carefully reviewed in light of the Office Action mailed January 20, 2004. At the time of the Office Action, Claims 1-17 were pending in this patent application. The Examiner rejected Claims 1-17. Thus, Claims 1-17 are now pending in the Application. Of these, Claims 1 and 8 are independent. Applicants respectfully request reconsideration and favorable action in this case.

**35 U.S.C. §102 Rejection**

Claims 1-8, 12-14 and 16 stand rejected under 35 USC 102(e) in view of Coronel et al. (U.S. Patent No. 6,363,294) ("Coronel"). Applicants respectfully traverse this rejection, and the assertions and determinations therein, for at least the following reasons.

Claim 1 recites, in part, a history executive element "for automatically deriving relationships among portions of said process event information and batch procedure event information based on generated event messages". Coronel does not teach or suggest these elements of Claim 1. Coronel relies upon manual configuration of the database by human process engineers. See Coronel, col. 7, lines 46-61 ("A preliminary but essential step of the method consists to establish an adequate database. First of all, for each step of the process, process engineers select a predetermined one or several process parameters that allow the system to monitor that step." "These identified deviations are based on all the possible causes of wafer rejection based on experimental or empirical or other information known to the process engineers (hereinafter referred to as expert information)."). Coronel also relies upon manual configuration of the alarms. See Coronel, col. 7, line 65 – col. 8, line 4 ("The process engineers define the set of analysis rules that permit to characterize these deviations and establish the corresponding rejection criteria. These rules are coded in the form of algorithms that are also stored in the database." "An alert code and an action, still based upon the expert information, are assigned to each deviation and coded the same way in the database." "The whole set of alert codes constitutes the alarms of this step in consideration."). Further, according to Coronel, "[t]hese operations are performed for each processing step of the wafer fabrication process and for each tool of the manufacturing line wherever possible." Coronel, col. 8, lines 4-7. In contrast, Claim 1 recites "automatically deriving relationships" among

portions of said process event information and batch procedure event information “based on generated event messages”, and does not rely upon manual, human intervention. See also, Applicants’ Specification, p. 13, lines 12-19 (For example, “[b]y so automating the determination of such relationships, the present invention obviates the requirement of prior techniques to manually configure such event timing information.”).

With respect to the Examiner’s arguments related to automatic derivation on pages 13-14 of the Official Action, as discussed above, Coronel’s analysis algorithms are manually created. Further, Coronel’s mere mention that the batch history may be used for statistical purposes provides no enabling teaching or suggestion of how to actually use the statistical information beyond computing an average (col. 15, lines 1-4 and 58-61), and a vague discussion of how the statistics could be of “great value” (col. 17, lines 4-23). However, none of the information in Coronel teaches or suggests “automatically deriving relationships” among portions of said process event information and batch procedure event information “based on generated event messages”.

Thus, Coronel does not teach or suggest every element of Claim 1. Therefore, Claim 1 is patentable over the cited reference and Applicants respectfully request allowance of Claim 1.

Independent Claim 8 is patentable over Coronel for at least reasons analogous to those presented above in association with Claim 1. Therefore, Applicants respectfully request allowance of independent Claim 8.

Dependent Claims 2-7 depend from independent Claim 1, and dependent Claims 12-14 and 16 depend from independent Claim 8. Independent Claims 1 and 8 have been shown above to be allowable. Thus, dependent Claims 2-7, 12-14 and 16 are patentable as depending from an allowable base claim and as including further distinctions over the cited reference. Therefore, Applicants respectfully request allowance of dependent Claims 2-7, 12-14 and 16.

**35 U.S.C. §103 Rejections**

Claims 9, 15 and 17 stand rejected under 35 USC 103 over Coronel in view of Hohkibara et al. (U.S. Pat. No. 6,438,436) ("Hohkibara"). Applicants respectfully traverse this rejection, and the assertions and determinations therein, for at least the following reasons.

Applicants respectfully submit that the combination of Coronel with Hohkibara is improper as there is no motivation to combine these references. Hohkibara involves the use of Gantt charts for organizing work shifts. Hohkibara, col. 7, lines 49-52. The mere fact that Coronel and Hohkibara both involve wafer production would not motivate one of skill in the art to add Hohkibara's Gantt charts to Coronel's wafer fabrication process in order to create a "means for presenting said batch procedure event information and process event information and said derived relationships as a Gantt chart wherein said Gantt chart is representative of procedural elements of the batch procedure" as recited, in part, by Claim 9 because there is no teaching or suggestion in either Hohkibara or Coronel of presenting "batch procedure event information" or "derived relationships" using Gantt charts. Also, Applicants respectfully submit that even if one of skill in the art was motivated to combine Hohkibara and Coronel, the combination provides no teaching or suggestion of these elements of Claim 9 because the mere existence of a Gantt chart in Hohkibara does not teach or suggest "presenting said batch procedure event information and process event information and said derived relationships as a Gantt chart wherein said Gantt chart is representative of procedural elements of the batch procedure". Thus, Applicants respectfully request withdrawal of this rejection.

In addition, dependent Claims 9, 15 and 17 depend from independent Claim 8. As discussed above, Coronel does not teach or suggest every element of Claim 8. Claim 8 recites, in part, "means for visually presenting to a user said batch procedure event information and process event information and automatically deriving relationships among portions of said batch procedure event information and process event information." In addition to the discussion above with respect to Claims 1 and 8, Applicants note that manual systems such as Coronel's are "cumbersome to the user and prone to error". Applicants' Specification, p. 13, line 9; see also Applicants' Specification, p. 13, lines 4-11. Not only does Coronel not teach or suggest every element of Claim 8, but Coronel's requirement of manual configuration teaches directly away from "automatically deriving relationships" as recited by Claim 8.

Because Coronel teaches away from these elements of Claim 8, Coronel does not teach or suggest every element of a dependent claim of Claim 8. Hohkibara does not teach these elements of Claim 8, nor does the Examiner rely upon Hohkibara for these elements.

Thus, Coronel does not teach or suggest every element of Claims 9, 15 and 17. Therefore, Claims 9, 15 and 17 are patentable over the cited references, either alone or in a proper combination, and Applicants respectfully request allowance of Claims 9, 15 and 17. Further, as dependent Claims 9, 15 and 17 depend from independent Claim 8, shown above to be allowable, dependent Claims 9, 15 and 17 are patentable as depending from an allowable base claim.

Claims 10-11 stand rejected under 35 USC 103 over Coronel in view of Hohkibara and in view of Cartsonis et al. (U.S. Pat. No. 6,584,501) ("Cartsonis"). Applicants respectfully traverse this rejection, and the assertions and determinations therein, for at least the following reasons.

Applicants respectfully submit that the combination of Cartsonis with Coronel and Hohkibara is improper because there is no motivation to combine the references. One of skill in the art would not be motivated to combine Cartsonis's computer network data traffic analyzer with Hohkibara's production scheduling system or Coronel's wafer fabrication process because there is no suggestion in either Cartsonis or Hohkibara of the desirability or relevance of a computer network data traffic analyzer. Also, the mere mention of Gantt charts in Cartsonis and Hohkibara provides no motivation to combine the references as their uses of the Gantt charts are completely unrelated to each other and provide no suggestion as to the desirability of such a combination. See Hohkibara, col. 7, lines 49-52, Cartsonis, col. 5, lines 4-17.

Dependent Claims 10-11 depend from independent Claim 8. Applicants respectfully submit that Claims 10-11 are allowable as depending from an allowable base claim. Further, as discussed above in association with Claims 9, 15 and 17, neither Coronel nor Hohkibara teaches or suggests every element of Claim 8, the combination of Coronel and Hohkibara is improper, and Cartsonis does not teach or suggest every element of Claim 8 nor does the Examiner rely upon Cartsonis with respect to Claim 8. Therefore, Applicants respectfully request allowance of Claims 10-11.

**Conclusion**

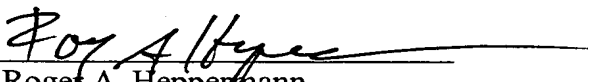
Applicants have now made an earnest attempt to place this case in condition for immediate allowance. For the foregoing reasons and for other reasons clearly apparent, Applicants respectfully request reconsideration and allowance of Claims 1-17.

Although Applicants believe that no other fees are due, the Commissioner is hereby authorized to charge any fees or credit any overpayments to Deposit Account No. 13-2855 of Marshall, Gerstein & Borun LLP. In addition, if a petition for an extension of time under 37 CFR 1.136(a) is necessary to maintain the pendency of this case and is not otherwise requested in this case, Applicants request that the Commissioner consider this paper to be a request for an appropriate extension of time and hereby authorize the Commissioner to charge the fee as set forth in 37 CFR 1.17(a) corresponding to the needed extension of time to Deposit Account No. 13-2855 of Marshall, Gerstein & Borun LLP.

If there are matters that can be discussed by telephone to further the prosecution of this application, Applicants respectfully request that the Examiner call its attorney at the number listed below.

Respectfully submitted:

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